

We claim:

Claims

1. A method for treating an ocular neovascular disease in a patient, said method comprising the steps of administering to said patient an effective amount of an agent that inhibits the development of ocular neovascularization, said agent being provided in a controlled release formulation comprising a biocompatible, biodegradable polymer selected from the group consisting of lactide polymers, lactide/glycolide copolymers, or polyoxyethylene-polyoxypropylene copolymers.
2. The method of claim 1, wherein said neovascular disease is selected from the group consisting of ischemic retinopathy, intraocular neovascularization, age-related macular degeneration, corneal neovascularization, retinal neovascularization, choroidal neovascularization, diabetic macular edema, diabetic retina ischemia, diabetic retinal edema, and proliferative diabetic retinopathy.
3. The method of claim 1, wherein said agent comprises an anti-VEGF agent.
4. The method of claim 3, wherein the anti-VEGF agent is selected from the group consisting of aptamers, antibodies, antibody fragments, and antisense molecules.
5. The method of claim 4, wherein said neovascular disease is age-related macular degeneration.
6. The method of claim 4, wherein said neovascular disease is proliferative diabetic retinopathy.

7. The method of claim 5, wherein said anti-VEGF agent comprises an aptamer.
8. The method of claim 7, wherein the aptamer comprises a nucleic acid ligand to vascular endothelial growth factor (VEGF).
9. The method of claim 8, wherein said VEGF nucleic acid ligand comprises ribonucleic acid.
10. The method of claim 9, wherein said VEGF nucleic acid ligand comprises deoxyribonucleic acid.
11. The method of claim 8, wherein said VEGF nucleic acid ligand comprises modified nucleotides.
12. The method of claim 11, wherein said VEGF nucleic acid ligand comprises 2'-F-modified nucleotides.
13. The method of claim 8, wherein said VEGF nucleic acid ligand comprises a polyalkylene glycol.
14. The method of claim 13, wherein said polyalkylene glycol is polyethylene glycol (PEG).
15. The method of claim 11, wherein said VEGF nucleic acid ligand comprises 2'-O-methyl (2'-OMe) modified nucleotides.
16. The method of claim 7, wherein the aptamer comprises pegaptanib sodium.

17. The method of claim 16, wherein said anti-VEGF aptamer is delivered to the eye by transcleral diffusion.

18. A method for treating age-related macular degeneration in a patient, said method comprising the steps of administering to said patient an effective amount of an anti-VEGF agent that inhibits the development of ocular neovascularization, said agent being provided in a controlled release formulation comprising a biocompatible, biodegradable polymer selected from the group consisting of lactide polymers, lactide/glycolide copolymers, or polyoxyethylene-polyoxypropylene copolymers.

19. The method of claim 18, wherein the agent comprises an aptamer.

20. The method of claim 19 wherein the aptamer comprises pegatanib sodium.